

TECHNOLOGY READINESS LEVEL: 4

US PATENT # 8,022,265

KEY ELEMENTS HAVE BEEN DEMONSTRATED IN THE LAB.

TECHNOLOGY SUMMARY

Sandia National Laboratories previously developed DF-200, which is a decontamination formulation for the neutralization of chemical and biological warfare agents and biological pathogens (US Patent# 7,390, 432 and 6,566,574). DF-200 is an all liquid version that includes all of the needed water within the packaged formulation. This configuration is approximately 75% water and a gallon can weigh approximately 9 lbs., which can present a logistics burden.



SNL has developed a new configuration of the decontamination formulation that utilizes a solid peracid compound and cationic surfactants that can be packaged as a dry kit, with most or all of the water removed. This reduces the packaged weight by approximately 80%. Freshwater or saltwater can then be added to the formulation at the time of use.

The new formulation meets the CBW agent decontamination requirements of the US Department of Defense for significantly reduced weight and volume burdens. It also addresses the need for decontamination formulations that are

non-toxic, non-corrosive, low-cost, have a long shelf-life, and that can be delivered by a variety of means, including sprays, foams, fogs, mists, aerosols, gels, creams, etc.

POTENTIAL APPLICATIONS

- Homeland Security
- Public Safety
- Agriculture/Food Safety
- First Responders

TECHNOLOGICAL BENEFITS

- Neutralizes adverse health effects of both chemical and biological warfare agents and toxic industrial chemicals
- Packaged weight reduced by 80%, which lowers logistical burdens
- Easily deployable, fast reacting, environmentally friendly with low toxicity and corrosive properties
- High storage stability in extreme temperatures
- Local water sources can be used as the make-up water

TECHNOLOGY INQUIRY?

For more information or licensing opportunities contact us at

ip@sandia.gov

Refer to SD # 10530

or visit

<https://ip.sandia.gov>